

THE PLOTTER

CLACKAMAS COUNTY AREA T/S
USERS GROUP
NEWSLETTER

VOLUME 2, NUMBER 12

EDITED BY: ROD GOWEN
CHAIRMAN: RICK READ
V-CHAIRMAN: DENNIS JURRIES
SEC/TREAS: ROD GOWEN
PR OFFICER: BOB EVANS
LIBRARIAN: LAURA GOWEN
ED/ASSISTANT: LAURA GOWEN
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MEETINGS

Our November meeting was called to order at 7:40 PM on Nov. 2, 1984, in Rm. 142 of Clairmont Hall, CCC. After announcements and reports, we went on to Old Business.

Old Business: Nominations were closed for officers. As you can see, the ballots are to be mailed in to the newsletter or, if you are coming to the Dec. meeting, bring them with you. But, no matter which way, just get them in.

We finally got a copy of Sinclair Computing so we can get our subscription going.

New Business: There was some discussion about future Computer shows in our area. Dick Wagner suggested that a committee be formed to handle details of shows. More on this later.

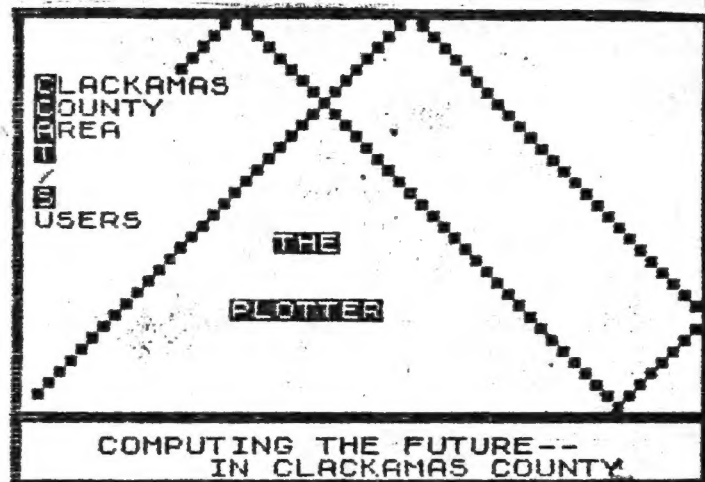
There was some discussion about the group purchasing an Eprom Programmer for use to make new cartridges for our 2068's. What do you think? We will be talking more about it at the next meeting, which will be held:

on: DECEMBER 5, 1984
at: 7:30 P.M.
in: COMMUNITY ROOM
FAR WEST FED SAVINGS
OR CITY SHOP CENTER

Hope to see all of you there.
COME AND SEE WHAT YOUR T/S COMPUTER CAN DO!!!***

* LAWS OF COMPUTING *

Any given program, when running, is obsolete.



If a program is useless, it will have to be documented.

If a program is useful, it will have to be changed.

Any program will expand to fill all available memory.

The value of a program is proportional to the weight of it's out put.

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BITS and BYTES

WHAT'S NEW(S) THIS MONTH-

It's here! Almost! A&J Micro-drive, of California, has just announced the Dec. release of the new Model 2000 Microdrive for the 2068. It will use standard SAVE and LOAD commands, with a flag symbol. Example: SAVE "01,SAMPLE". The "01" flags the microdrive to SAVE that program on track 1 of the wafer. A typical 32K program will take about 34 seconds to LOAD. Sounds good to me. Cost? About \$200. That's not much more than just the interface alone for a disk drive.

We now have some additional information on the use of SMART TERM II for the 2050 Modem. Anyone who needs a copy of them should get in contact with Rod Gowen or Dennis Jurries.

#15 EMULATOR? - That's right! For about that much you can build a Spectrum ROM into your 2068! If you are interested, just send a SASE to the following address:

Peter Geller
7912 Charles Thompson Lane
Annandale, VA 22003

He says that for #12 you can get the ROM from England. For about \$2.50 you can get the rest of the parts to install the unit. Be sure to enclose \$1.00 to cover costs of copying and handling. Peter will send schematics, instructions and a list of places to write to in England for the ROM as well as other items.

FREE PROGRAM! - That's right! A free program. Send \$1.00 to cover postage and handling along with a blank cassette and a SASE (legal size) for your free copy. It is a database program for the 2068. Send to:

Randy Kuhn
116 Stonemountain Dr.
Conroe, TX 77302

If any of you send for it, let us know how it works.

PATS BIT: - One of our members, Betty Schaffler, is also a PATS member and was made Librarian of that group last month. Good luck to her and we hope she continues to be active in our group as well. See you soon, Betty.

ZX MISSING? - That's right. We are missing the July-August and September-October issues of ZX Computing. They were taken from the Library at the Sept. meeting without being signed for. ANYONE WHO HAS OR KNOWS WHERE THESE MAGS ARE, PLEASE GET THEM BACK TO THE LIBRARY!! THERE ARE OTHERS WHO WOULD LIKE TO USE THEM. THANKS.....

QL? - Not yet! We may see them over here in late January according to the last word from SINCLAIR. Other sources say not until February. We'll just have to wait and see.

ROMSWITCH: - Tim Woods has bought and installed a ROMSWITCH for his 2968. If anyone is interested in how it works, you might give him a call.

Anyone having any BITS of news of information that you think might be of general interest, please send them in and we will get them printed here.

#####

HARDWARE REVIEW

ANOTHER SOLUTION TO COPY TAPES Dick Wagner

You can copy any tape with this procedure. The method requires a second cassette recorder and a \$1.99 device from Radio Shack. With this Mini Phone Plug / Jack Signal Reducer, #274-301, you are able to reduce the playing recorder signal to the proper level for the MIC input of a recorder.

Use your usual computer recorder to receive the signal for recording. Plug in the Signal Reducer in the MIC jack. Make a cable connection from the Signal Reducer to the EAR jack of the playing recorder. With volume level the same as for Loading, play the tape to be copied. Start the recording tape first with a 5 second lead then start the tape to be copied.

My recorder requires slightly higher volume on a copied tape by this method. Other makes will be different so just try Loading as usual and go from there.

=====

Program complexity grows until it exceeds the capability of the programmer to maintain it.

Make it possible for programmers to write in English and you will find that programmers cannot write in English.

If builders built buildings the way programmers wrote programs, then the first woodpecker that came along would destroy civilization.

#####

WELL, with this issue we finish the second volume of THE PLOTTER newsletter. We hope that we have helped some of you over the past 12 months. If we seemed to complain, that's because we were! We felt that a complaint or two might get some responses. Our biggest complaint has been, and continues to be, the fact that we need more input from YOU, the readers. As previously stated in this as well as most other newsletters, we need a lot of input to keep up a good, interesting publication.

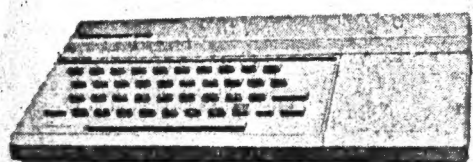
We hope that with new leadership coming in the first of the year, we will get into our third year with as much zest as in the past two years. With a lot of help from you, the general membership, we WILL have an excellent year.

We know that the SINCLAIR IDEAL is not dead or dying. With Uncle Clive working on to promote his products at a time when we, here in the USA, are seeing a resurgence of interest in both the TS line itself as well as in the manufacture of peripherals and software for them, tells us that we are indeed, not alone. We hope that if any of our members or members of any of the groups that we are read by have any ideas for hardware or software projects, that you follow through and give the rest of us out here a chance to use them and yourself a chance to increase your stature in the computing community as well as your bank account.

Let's make the coming year our best! Let's all pull together to assure that it is. We will be here to help if we are needed.
GOOD LUCK!
SEE YOU NEXT YEAR.

TITLE PAGE

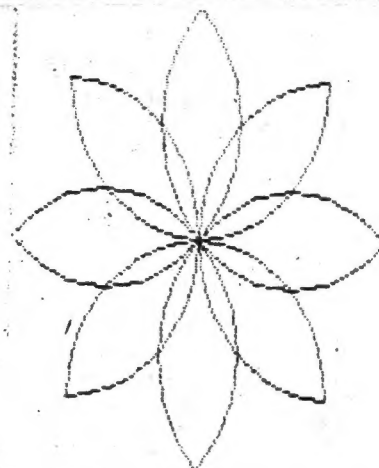
KEEP ON-
POKEing and PEEKing.....



Use the POWER
within your reach!



+

[illegible]

TS2068
FUN

[illegible]

SECRET

[illegible]

THE BIG PICTURE

THE UNIVERSITY OF CHICAGO PRESS

[illegible]

If you own a VCR (Video Cassette Recorder), then you can use the Monitor output of your 2068 to get a very good quality picture on your large screen TV. You will also find that you can tape any program listing and/or program in progress on a video cassette. All you do is put the cable from the Monitor out of the 2068 to the Video In on the VCR. Then switch the VCR to the Camera mode and presto, the 2068 display is coming through the VCR and, as you can now see, it is a much improved picture.

Try it if you have a VCR. Let us know if you do. You might let us know if you have any other Tech Tips for us. We will print them and give credit where it's due. This one comes from Rod Gowen.

ZX/TS
P and R

ENJOY

A useful little program to turn your computer into an adding machine, but what is special is the routine to align the decimals.

Another tip from Mervin is that you can economise when using this program by turning the printer paper around and re-using it.

```

5 RAND
10 LET S=0
20 LET T=0
30 LET X=14
40 LET Y=INT (RND*26)
50 PRINT AT 21,Y;"*---*"
60 FOR N=1 TO 11
70 GOSUB 400
80 SCROLL
90 SCROLL
100 GOSUB 400
110 NEXT N
120 IF X=Y+1 THEN LET S=S+1
130 LET T=T+1
140 IF T=20 THEN GOTO 300
150 GOTO 40
300 CLS
310 PRINT "SCORE ";S;" OUT OF "
;T;
320 STOP
400 PRINT AT 0,X;" 0 "
410 PRINT AT 1,X;"███"
420 PRINT AT 2,X;"████"
430 PRINT AT 3,X;"█████"
440 IF INKEY$="5" AND X>0 THEN
LET X=X-1
450 IF INKEY$="8" AND X<28 THEN
LET X=X+1
460 RETURN

```

This down-hill skier program works on the ZX81 in 1K and is quite rapid even in slow mode. The object is to move the skier, using the keys "5" and "8", through 20 randomly positioned gates which scroll up from the bottom, without hitting the

S is the score, T the number of gates, X the skier's position and Y the position of the gate.



```

5 RAND
10 LET S=0
20 LET T=0
30 LET X=14
40 LET Y=INT (RND*26)
50 PRINT AT 21,Y;"*---*"
60 FOR N=1 TO 11
70 GOSUB 400
80 SCROLL
90 SCROLL
100 GOSUB 400
110 NEXT N
120 IF X=Y+1 THEN LET S=S+1
130 LET T=T+1
140 IF T=20 THEN GOTO 300
150 GOTO 40
300 CLS
310 PRINT "SCORE ";S;" OUT OF "
;T;
320 STOP
400 PRINT AT 0,X;" 0 "
410 PRINT AT 1,X;"███"
420 PRINT AT 2,X;"████"
430 PRINT AT 3,X;"█████"
440 IF INKEY$="5" AND X>0 THEN
LET X=X-1
450 IF INKEY$="8" AND X<28 THEN
LET X=X+1
460 RETURN

```

ADDING SOUND EFFECTS

There's a good chance that you are interested in playing games on your Timex Sinclair. Can the computer give the added dimension of sound to games? Can it make sounds like phasors firing, footsteps or train noises? The answer is both Yes and No. It can produce some fairly useful noises which will enhance your games.

However, if you expect the sounds to be as good as those produced by arcade machines, I'm afraid you'll be a little disappointed.

PHASOR FIRE, PHASOR FIRE 2 and PHASOR 3 give three ways of making a suitable sound for a space shooting game, and WALKING shows how you can incorporate sound with movement. Note that the first graphics character in line 140 is an L, the second is a K.

PHASOR FIRE

```
10 REM PHASOR FIRE
20 LET D=0.0125
30 FOR X=1 TO 2
40 FOR Y=4 TO 16 STEP 2
50 BEEP D,Y
60 NEXT Y
70 NEXT X
```

```
10 REM PHASOR FIRE 2
20 FOR X=-10 TO 0
30 BEEP 0.0125,X
40 NEXT X
50 FOR Y=0 TO -5 STEP -1
60 BEEP 0.0125,Y
70 NEXT Y
```

```
10 REM PHASOR 3
20 FOR X=5 TO 20 STEP 1.5
30 BEEP .008,X
40 NEXT X
50 FOR Y=20 TO 5 STEP -1.5
60 BEEP .008,Y
70 NEXT Y
80 PAUSE 30
90 RUN
```

```
10 REM WALKING
20 FOR A=0 TO 7
30 READ X
40 POKE USR "L"+A,X
50 NEXT A
60 FOR A=0 TO 7
70 READ X
80 POKE USR "K"+A,X
90 NEXT A
100 FOR T=0 TO 31
110 PRINT AT 21,T;" ";
120 NEXT T
130 FOR C=0 TO 31
140 PRINT AT 20,C;" ": PAUSE
3: PRINT AT 20,C;" ": PAUSE 3:
PRINT AT 20,C;" "
150 BEEP 0.02,30: BEEP 0.02,40
160 NEXT C
170 GO TO 100
180 REM DATA FOR 2 VERSIONS OF
MAN
190 DATA 24,36,153,126,24,100,
132,4,24,36,153,126,24,38,33,32
200 STOP
```

Another useful routine is the program which simulates a bomb drop. This makes the frequency of the note fall from around the highest pitch available to one some 20 semitones lower. The rate of fall is fast at first, but gets even faster to give the impression of the bomb speeding up as it gets closer to the ground.

BOMB

```
10 REM BOMB
20 FOR X=69 TO 55 STEP -0.3
30 BEEP 0.05,X
40 NEXT X
50 FOR Y=0 TO 20
60 BEEP 0.01,-10: BEEP 0.01,
-50: BEEP 0.01,-60
70 NEXT Y
```

FROM: THE TIMEX SINCLAIR 2068
EXPLORED BY TIM HARTNELL

~~~~~

```
5 CLS
10 GO TO 1000
100 DIM H$(4)
105 LET P=4
110 LET H$="0000"
115 PRINT AT 20,0;" ";AT 20,0; F
LASH 1;">"; FLASH 0;" Enter the
decimal number."
120 INPUT d
122 LET e=d
125 PRINT AT 20,0;" "
130 LET n=INT (d/16)
131 LET rr=(d-16*n+48)
132 IF rr>57 THEN LET rr=rr+7
135 LET H$(P)=CHR$(rr)
140 LET d=n
145 LET P=P-1
150 IF d>0 THEN GO TO 130
160 PRINT AT 20,0;e;" Hex Value
is ";H$
170 GO TO 1000
200 PRINT AT 20,0;" ";AT 20,0; F
LASH 1;">"; FLASH 0;" Enter the
four digit hex."
202 POKE 23658,8
205 INPUT H$
210 LET d=0
215 FOR P=1 TO 4
217 LET rr=(CODE (H$(P))-48)
218 IF rr>9 THEN LET rr=rr-7
220 LET d=d*16+(rr)
225 NEXT P
230 PRINT AT 20,0;" ";AT 20,0;H$
;" Decimal value is ";d
235 POKE 23658,0
240 GO TO 1000
300 DIM a$(8)
305 LET o=0
307 PRINT AT 21,0;" "
310 PRINT AT 20,0;" ";AT 20,0; F
LASH 1;">"; FLASH 0;" Enter BIN
code."
314 INPUT b$
315 LET a$=b$
316 LET i=LEN b$
317 IF i<>8 THEN GO TO 400
320 LET b=128
330 FOR f=1 TO 8
340 LET q=VAL a$(f)
350 LET o=o+(q*b)
360 LET b=b/2
```

(Cont. next page)

```

370 NEXT I
375 PRINT AT 21,9;" "
380 PRINT AT 20,0;" "
;" BIN is ";0;" decimal."
390 GO TO 1000
400 IF I<8 THEN PRINT FLASH 1;A
T 20,0;" NOT ENOUGH DIGITS WERE
ENTERED "
410 IF I>8 THEN PRINT FLASH 1;A
T 20,0;" TOO MANY DIGITS WERE EN
TERED "
420 PAUSE 100
430 PRINT AT 20,0;" "

440 GO TO 300
500 CLS
510 PRINT AT 10,0;" "
;"AT 12,4;"E
XIT COMMAND EXECUTED";" PRESS E
NTER TO CLEAR MEMORY";AT 15,0;" "

515 PAUSE 4E4
520 NEW
1000 PRINT AT 5,0;" "
;"AT 7,3; INU
ERSE 1;"DECIMAL/HEX/BIN CONVERTO
R";
1010 PRINT AT 9,6;"1) DECIMAL TO
HEX";AT 10,6;"2) HEX TO DECIMAL
";AT 11,6;"3) BIN TO DECIMAL";AT
12,6;"4) EXIT PROGRAM"
1015 PRINT AT 13,0;" "

1017 PRINT ,," Enter your choic
e 1 to 4"
1018 PRINT AT 15,0; FLASH 1;">"
1019 BEEP .15,10
1020 INPUT S
1025 PRINT AT 15,0;" "
1030 IF S<1 OR S>4 THEN GO TO 10
00
1035 IF S=4 THEN LET S=5
1040 GO TO S*100
1050 STOP
1060 SAVE "conv" LINE 1

```

By Vincent Lyon

If you program in machine code (or would like to) or like to design user graphics, here's a simple little program that makes it easy to convert hex to decimal, decimal to hex and BIN numbers to decimal. While the program is rather clear and simple, there is one important thing to remember in entering hex you wish to convert to decimal. That is 05C3 is very radically different from 5C30.

The program is written for the 2068, but a TS1000 version can be written by just changing the CHR\$ codes. If you can't figure that out, just give me a call.

Feel free to modify the program so that it prints out data statements for your user graphics, or MC routines, there is certainly enough memory available. (The program loads in about 20 seconds). It may even be merged with some assembler programs.

\*\*\*\*\*

## SOFTWARE REVIEW

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### MEET MUSICOLA

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By Vincent Lyon

It seemed simple enough. I would get a discount on Musicola if I would write a short review on the program. However, after four hours of trying to load a very noisy tape - that never did load - and 35 hours of experimenting with Musicola, I'm still not sure that I'm fully prepared to write about a program so complex interesting and frustrating. But since I know it's only right that I actually earn my five cents an hour, I'll try my best.

Musicola is designed so that one may enter or compose music using the BEEP and sound channels for a full three part harmony. The documentation that comes with the program barely explains the full capabilities of the program and one is expected to just play with the various facets to become acquainted with them.

The documentation states that the program is "bug free". While that is NOT TRUE, certainly any one who has a competent knowledge of music will enjoy entering and playing melodies, but also will wind up frustrated by Musicola's short-comings.

The complexity of the program does not permit a complete outline of each of it's functions in such a short review, but it does allow one to Enter melodies, add Harmony and/or Chords, Edit the music entered and Save and Load music. I was more able than most to use the program since I have two 2068's side by side and I was able to keep the HELP page on one while I composed on the other. If I hadn't, I would have gone stark raving mad going back and forth to the HELP page to find the right key for the note I wanted. It would have been better if the program allowed the user to copy the HELP page, but the program is "unbreakable" (or is supposed to be - for more info, just ask).

Those really interested in knowing the bugs I discovered, may either call me or ask me at the next meeting.

(Cont. next page)



If you don't know music or only want to learn, STAY AWAY from Musicola. But if you know the minor chord to a D flat 7 you may enjoy the thought process that went into Musicola. And, if you happen to be a programmer, I'm sure that with some diligent detective work and minor editing Musicola could be a real delight

ADS

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SPECIAL PRE-CHRISTMAS SALE

Due to overstock, we are having to part with the items below at substantial savings to you:

T/S 2040 PRINTER ONLY \$67.50
THE BOSS JOYSTICK ONLY \$10.95

(LIMITED STOCK--CALL TODAY)

RMG ENTERPRISES
(503) 655-7484

COLOR PRINTER FOR \$150 ?

Okidata OKIMATE 10 made for the Commodore and Atari computers and for the Apple in Dec. This is a near letter quality printer featuring red, orange, green, blue, purple, yellow and black colors. Several of us believe that with enough of a write in campaign Okidata may be persuaded to adapt the Okimate 10 to the T/S 2068. Here is the address:

Okidata
Mt. Laurel, NJ. 08054

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## SOFTWARE IMPROVEMENT

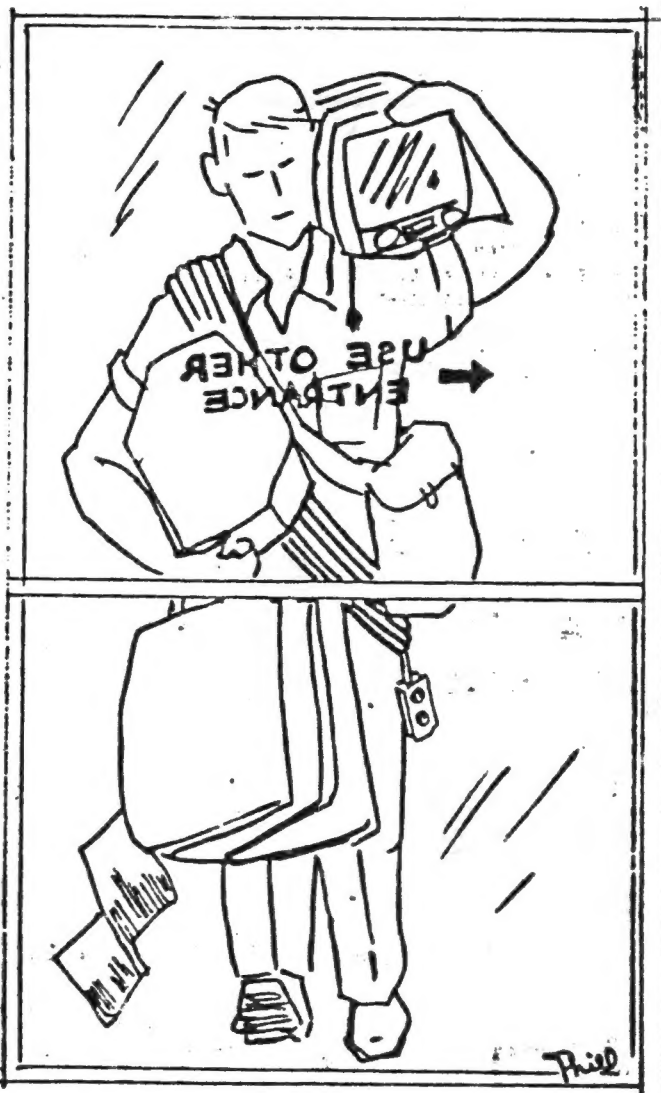
A WP32 VERS 2.0 IMPROVEMENT  
Dick Wagner

Bob Drifelt of GESSO SOFTWARE was very helpful in providing program change in his word processor program to slow the repeat rate for slow fingers. Insert these two lines for a mellow sound and easier repeating

2153 BEEP .02,15  
2154 PAUSE 0

This points out the advantage of having a local dealer like Rod Gowan to work through.

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